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DESCRIPTION OF A NEW SPECIES OF NEOTOMA FROM PENNSYLVANIA.

BY WITMER STONE.

I have recently obtained through the kindness of Mr. J. G. Dillin two specimens of a wood rat which were secured near the top of South Mountain (2,000 ft.), Cumberland County, Penna., some six miles from Pine Grove, at a point known as Lewis's Cave, which constitute the first record of the occurrence of the genus *Neotoma* in this State.

The first specimen of this rat secured by Mr. Dillin was a male, and was taken in a trap set for raccoons. It was at once recognized as different from the common brown rat, and was preserved with a view to having its identity settled, but was afterward unfortunately lost.

The next day, Dec. 2, 1892, a female specimen was secured and was brought to me in the flesh. At my request Mr. Dillin wrote to friends who were hunting on South Mountain and secured one more specimen.

After comparing these two specimens with a series of *Neotomas* from the collection of the American Museum of Natural History kindly loaned me by Mr. F. M. Chapman and some specimens loaned by Dr. C. Hart Merriam, of the U. S. Department of Agriculture, I am convinced that they represent an undescribed species, for which I propose the name of *Neotoma pennsylvanica*.

This species may be distinguished from *N. floridana* of the South Atlantic and Gulf States by its larger size, its densely hairy and distinctly bicolored tail and by certain well marked cranial characters.

The specimens here described are both females, and are perhaps not quite full sized, though evidently adult. The male specimen, according to Mr. Dillin's account, must have been at least twenty inches (508 mm.) long, and had the tail more hairy than the two in my possession. The detailed description follows:

Neotoma pennsylvanica sp. nov. Pennsylvania Wood Rat.

Type No. 156 Collection of Witmer Stone, ♀ South Mountain, Cumberland County, Penna., Dec. 2, 1892. J. G. Dillin.

General color similar to that of *N. floridana*, plumbeous above with a number of black hairs interspersed and a yellowish brown

undertone which is pure and bright on the sides of the head and body, becoming almost a pinkish tint on the flanks. Feet and lower surface pure white.

Tail densely hairy, surpassing in this respect any specimens of either *N. floridana* or *N. mexicana* that I have seen. The color of the tail is black above and pure white beneath, the line of demarcation being very sharp; viewed from directly above, the scales are completely hidden by the hairs. The two females in my possession measure as follows:

	Length.	Tail (Vert.).	Hind Foot.
	mm.	mm.	mm.
No. 156, Collection W. S.....	403	185	41
No. 157, " "	416	190	43

Comparing the skull of *N. pennsylvanica* with that of *N. floridana* we find it larger and proportionately longer and narrower. The upper surface is more nearly horizontal (*i. e.* not so much curved), the frontal bones are much depressed along the frontal suture, the outer edges next to the orbits forming decided ridges. The pterygoid processes are larger and converge more than in *N. floridana*, so that the meso-ptyergoid fossa is longer and narrower. The upper margin of the infra-orbital foramen as viewed from above is also much narrower in *N. pennsylvanica*. The teeth are rather heavier than in *N. floridana*, and the distance between the anterior molar and the incisor (from the alveolæ) is relatively greater.

A table of cranial measurements follows, the measurements of a male (No. 1,129) and female (No. 1,127) *N. floridana* from Gainesville, Florida, Amer. Mus. Nat. Hist. collection, being given for comparison:—

	N. pennsylvanica. Coll. W. Stone No. 157. No. 156		N. floridana. Am. Mus. Nat. Hist. No. 1127 No. 1129	
Occipito-nasal length.....	53	—	49·8	50
Basilar length (from foramen magnum to incisor).....	44·9	54	40·5	40
Zygomatic breadth.....	27	27	25·2	25
Mastoid breadth.....	20·6	20	19	19·2
Interorbital constriction.....	7	6·6	6·1	7·3
Length of nasals.....	20	21	18·5	18·9
Foramen magnum to incisive foramen.....	31	—	27·2	27
Foramen magnum to palate.....	20·6	—	20	19·5
Length of upper molar series (on alveolæ).....	9·8	10	9·2	9
Length of incisive foramen.....	10	10·6	10·2	10·5
Length of mandible (symphysis to angle).....	30·5	30	28·5	27·5
“ “ “ (symphysis to condyle).....	32·2	31	31	29·6
Coronoid process from angle.....	15·3	14·5	13·8	12·2
RATIOS TO BASILAR LENGTH.				
Zygomatic breadth.....	60·1		62·2	
Mastoid breadth.....	45·9		46·9	
Nasals.....	44·5		45·6	
Upper molar series (on alveolæ).....	21·8		22·7	
Incisive foramen.....	22·2		25·1	
Foramen magnum to incisive foramen.....	69		67·1	
Foramen magnum to palate.....	45·8		49·4	